



IDEM
Office of Air Management
Rules Guidance

November, 1998

**Development of Amendments to Rules Concerning Motor Vehicle Inspection and
Maintenance Requirements
LSA Document # 98-134**

FACT SHEET

Overview

This rulemaking proposes to amend 326 IAC 13-1.1, *Motor Vehicle Inspection and Maintenance Requirements*. This rule provides for emission standards and testing criteria for motor vehicles in Lake, Porter, Clark, and Floyd Counties, which are designated "nonattainment" areas for the pollutant ozone. Currently, owners and operators of motor vehicles subject to 326 IAC 13-1.1 are required to maintain their motor vehicles and related air pollution control equipment in good working order and to have their vehicles' emissions checked every two (2) years.

This rulemaking makes the following four main changes:

- exemption of the current calendar year model vehicle plus the three (3) previous model years vehicles from emission testing;
- a shortened vehicle emission test;
- testing of vehicles equipped with second generation on-board diagnostics systems (OBDII); and
- elimination of the emission test currently required when there is a change in possession of motor vehicle titles.

Citations Affected

Amends: 326 IAC 13-1.1

Affected Persons

Citizens in Lake, Porter, Clark, and Floyd Counties.

Potential Cost

There is currently no fee to the motorist for a vehicle emissions test, which is funded through state and federal funds. These proposed changes would reduce the costs of the program to taxpayers because it would limit the cars being tested to those that are more likely to have excess emissions.

Description

After operating the upgraded vehicle emission testing program for more than one (1) year, IDEM believes that certain changes to the program are appropriate and will be in the best interests of both the public and the environment. In addition, changes in technology, modifications of federal requirements, and experience gained in the implementation of Indiana's enhanced vehicle emission testing program have prompted this rulemaking action.

Included in proposed changes to the rule are the following four main items:

Four year exemption

The first change, at 326 IAC 13-1.1-2, *Applicability*, specifically exempts vehicles of the current calendar model year plus the three (3) previous model years vehicles from emissions testing requirements. The rule currently provides an exemption only for the most recent model year.

IDEM's test records indicate that motor vehicles four (4) years old or newer have a failure rate of five tenths (0.5) percent compared to an average failure rate of thirteen and nine-tenths (13.9) percent for remaining vehicles tested.

The benefits of this exemption are two-fold. Testing is more efficient because newer cars, which have an extremely low failure rate, will not be unnecessarily tested. Further, cars which are required to be tested will have a reduced waiting time and increased accessibility to test sites. The United States Environmental Protection Agency (U.S. EPA) is now allowing states to exempt newer vehicles from testing requirements.

Shortened vehicle emission test

The second change provides for a shortened vehicle emission test for gasoline powered light and medium duty motor vehicles of model year 1981 through the current calendar year model. The current rule specifies the use of a two hundred forty (240) second transient vehicle emission test known as the I/M (Inspection and Maintenance) 240 test.

The shorter test has a ninety-three (93) second test cycle and is known as the I/M 93 test. IDEM has found that the shorter test yields results comparable to the

IM 240 test, and considerably shortens the time of the emissions check for the motorists.

While the I/M 240 test is the emission test currently included in the federal program, U.S.EPA has permitted Indiana to use the I/M 93 test. IDEM proposes to include both test types in 326 IAC 13-1.1-7. The I/M 93 test would be the primary test method unless the department or U.S.EPA determines that I/M 240 should be used instead.

The I/M 93 test differs from the I/M 240 in several ways.

- First, the length of test time the vehicle is driven on the dynamometer is reduced from 240 seconds to 93 seconds.

IDEM believes that the first 93 seconds are sufficient to identify vehicles whose emissions exceed the applicable standard.

- Second, neither the purge nor evaporative system (pressure) check is performed.

The purge test checks whether captured or stored fuel vapor in the charcoal canister is being removed and delivered to the engine during vehicle operation. The pressure test checks for leaks in all components, lines, and the fuel filler cap that control vapors.

Instead, the fuel filler cap pressure test will be performed, where the cap is tested for its effectiveness in forming a proper seal to create sufficient system pressure. The U.S. EPA recognizes the fuel filler cap pressure test as yielding most of the benefit provided by the purge and pressure tests. It is more quickly completed and does not involve opening the hood and disconnecting engine hoses.

On board diagnostic systems check

The third change adds provisions for the testing of vehicles equipped with second generation on-board diagnostics systems (OBDII). Beginning with model year 1996,

motor vehicles are equipped with OBDII.

OBDII computers monitor and actively perform diagnostic tests, looking at engine parameters such as air to fuel ratio and engine temperature. In vehicles equipped with OBDII systems, a malfunction indicator light (MIL) illuminates if a system or component either fails or deteriorates to the point where vehicle emissions could rise above one and one-half (1-1/2) times the federal emission standards.

IDEM proposes to add OBDII testing requirements at 326 IAC 13-1.1-7, *Testing parameters*. OBDII systems will be inspected as part of both I/M 240 and I/M 93 emissions tests. Also, at 326 IAC 13-1.1-8, *Testing procedures and standards*, an inspection of OBDII equipment is added as one (1) of several pieces of equipment that must be in working order before an emissions inspection will be performed.

Furthermore, a new section is added to provide for the testing of OBDII systems per U.S. EPA requirements. The new section, at 326 IAC 13-1.1-17.1, *On-board diagnostic check*, incorporates by reference federal requirements at 40 CFR 51, Subpart S, "Requirements for Preparation, Adoption, and Submittal of Implementation Plans", as amended at 61 FR 40945 (August 6, 1996) and 40 CFR 85, Subpart W, "Control of Air Pollution From Motor Vehicles and Motor Vehicle Engines", as amended at 61 FR 40946 (August 6, 1996).

The major components of OBDII systems check requirements include the following:

- a check of the self diagnostic system to determine that it is functioning properly and has not been tampered with;
- a specification of the test sequence

for the inspection of on-board diagnostic systems;

- and a specification of the test result provided with the on-board diagnostic test.

Off cycle testing

The fourth change eliminates the emission test currently required when there is a change in possession of motor vehicle titles. Currently, a motorist purchasing a used car must have the vehicle's emissions tested before obtaining a registration for it even if it has just recently been tested. If, based on vehicle identification number (VIN), the vehicle was due to be tested the next calendar year, the motorist would have to have this vehicle tested two (2) years in a row. This "off-cycle" testing affects approximately 45,000 motorists a year.

By requiring, at 326 IAC 13-1.1-5, *Issuance of certificates of compliance; testing and inspection schedule*, that motorists present a certificate of compliance for emissions testing only during the year that testing is required based on their vehicle's VIN in order to obtain registration, the rule will eliminate off-cycle testing for newly purchased or transferred vehicles. This will alleviate a burden to motorists that has had little effect on the overall reduction of emissions. Although a portion of these vehicles come from outside Lake and Porter county, a portion is sale or transfer within the county, so these vehicles would have already been subject to emission testing.

Other proposed changes

IDEM proposes to add provisions for the evaluation and, if necessary, decertification of Indiana certified emission repair technicians. Experience has demonstrated that it is necessary to have criteria in place to evaluate the performance of certified technicians. This capability will

set a performance standard and make choosing a technician for emissions repair more reliable for the motorist.

Also, proposed draft rule language limits to four (4) the number of times a vehicle may be retested after initial failure. A vehicle cannot be retested a fifth time until the type of repairs or modifications necessary has been evaluated by the department. This change will address those relatively few situations where motorists bring a failed vehicle in for multiple retests, even if minimal repairs have been made. This is a drain on public resources and does not achieve cleaner air.

Other proposed changes include the following:

- new or revised definitions where needed as a result of requirement changes;
- repeal of 326 IAC 13-1.1-17, *Fleet inspection procedures*, as it is no longer applicable; and
- the addition of a provision clarifying that motorists are required to exit their vehicles during the vehicle emission testing procedure.

Remaining proposed changes reflect changes in federal guidance, enhance the clarity of the rule, or improve the operation of the vehicle inspection and maintenance program.

Consistency with Federal Requirements

The amended rule is consistent with federal law and requirements.

CONSIDERATION OF FACTORS OUTLINED IN INDIANA CODE 13-14-8-4

Indiana Code 13-14-8-4 requires that in adopting rules and establishing standards, the board shall take into account:

- 1) all existing physical conditions and the character of the area affected;
- 2) past, present, and probably future uses of the area, including the character of the uses of surrounding areas
- 3) zoning classifications;
- 4) the nature of the existing air quality or existing water quality as the case may be;

- 5) technical feasibility, including the quality conditions that could reasonably be achieved through coordinated control of all factors affecting the quality; and
- 6) economic reasonableness of measuring or reducing any particular type of pollution.

The board shall also take into account the right of all persons to an environment sufficiently uncontaminated as not to be injurious to human, plant, animal, or aquatic life or to the reasonable enjoyment of life and property.

RECOMMENDATION

It is recommended that the board preliminarily adopt the amended rule as presented.

IDEM Contact

Additional information regarding this rulemaking action can be obtained by calling (800) 451-6027, press 0 and ask for Thomas A. Frankiewicz, Rules Development Section, Office of Air Management, (or extension 2-1553) or dial (317) 232-1553. Answers to technical questions or other information may be obtained by calling (800) 451-6027, press 0 and ask for Phil Doyle, Inspection and Maintenance Section, Office of Air Management (or extension 2-8420) or dial (317) 232-8420.